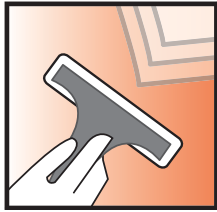




ACE *DIY*
Window Protection
Self-Installation Kit



ACE *DIY*
Installation
Instructions



ACE/Security Laminates

Do-it-yourself

Installation Instructions

This manual is intended to be used in conjunction with the instructional CD enclosed with this ACE/Security Laminates self installation kit. It is recommended that you watch the CD in its entirety before beginning the installation process.

Before You Begin

Ensure you have all the necessary tools ready before beginning installation.

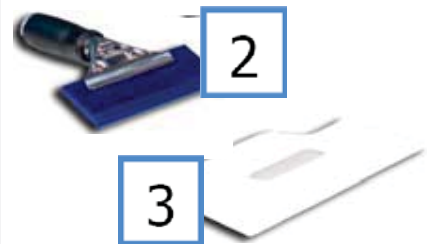
Glass Protection Self-Installation Kit

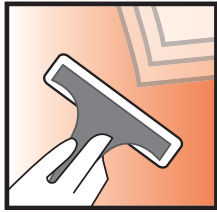
Tools Included:

- 1 Razor (for cleaning window)
- 2 Blue Max Power squeegee
- 3 Bumping Tool (5 way tool)
- 4 Spray Bottle
- 5 Slip Agent

Tools not included:

- Utility knife
- Measuring tape / ruler
- Lint free paper towels
(blue shop towels are recommended)
- Distilled / filtered water





Pre-Installation Site preparation

- 1.** Do not install our products on windows that are damaged (cracked, scratched), etched, textured or frosted. If the window already has solar film applied, this must be removed before installation of ACE products.
- 2.** Check the size of the window. If the window is larger than 3-4 feet (1-1.25 metres), it is recommended to install the film with a second person to help you hold the sheet of film when you are preparing to remove the release liner.
- 3.** Ensure you have a clean environment to work in. Minimize dust as much as possible by blocking your air vents and turning off any ceiling fans in the room that can circulate dust in the air. In addition, turning down your thermostat ensures that your furnace fan will not come on during installation.

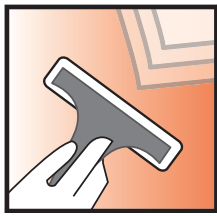
Glass Protection Self-Installation Kit

- 4.** Avoid installing the film on windows that are in direct sunlight or are hot due to reflected sunlight. This can lead to water spots that are visible in the final installation.

- 5.** Generally, you will need approximately 3 feet (1 metre) of space in front of the window to install the laminate. In addition, all blinds and window treatments should be removed before installation of the film.

- 6.** Since you will be spraying the window with slip solution (a mix of distilled water and slip agent) it is recommended to use a drop cloth under the window to protect furniture and floors. Turn off and unplug any electrical devices in the proximity of the window to avoid damaging the equipment.

- 7.** Ensure you have all the necessary tools ready before beginning installation.



Slip Solution

The correct mix ratio of slip solution is important to ensure proper installation of the film. The slip solution is a mixture of distilled or filtered water and slip agent. It is important not to use tap water since it can contain certain minerals and salts that can affect the final appearance of the laminate.

Mixture Instructions:

Add half a capful of the slip agent into the spray bottle and fill the with distilled/filtered water.

Glass Protection Self-Installation Kit

Cutting the Film

- 1.** Accurate window measurements are essential for a correct ACE/Security Laminates installation.
- 2.** It is necessary to leave a gap of 1/16" - 1/8" (1.5mm - 3mm) around the perimeter of the window. This small gap allows the film to expand in hotter temperatures. This small gap does not affect the integrity of the film. If you install the film flush to the window frame or rubber gasket, the film may not lay flat on the glass (referred to as a finger).
- 3.** Measure the glass surface of the window. If the window has rubber gaskets, measure from one gasket to the other. If the window does not have rubber gaskets, measure from where the window meets the frame. Subtract 1/8" (3mm) from both the width and height measurements to allow for the gap on all four sides.





4. Place the film on a large flat surface with the release liner facing down (located on the inside curl of the film). Protect the cutting surface by using a piece of commercial carpeting or cardboard. Using a utility knife and a straight edge/ruler cut the film to the measured size.

Cleaning the Window

1. Remove any tint, decals, signs, and stickers that are on the window to be laminated. The film must be applied directly to the bare glass surface.
2. Spray the glass thoroughly with the slip solution. Proceed by cleaning the window with the razor. Be careful not to jam the blade into the window gasket. Start at the top and work your way to the bottom.
3. Spray the window again and squeegee from the top of the window to the bottom.

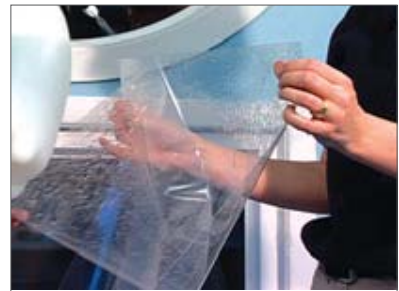


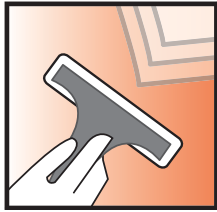
Glass Protection Self-Installation Kit

4. Wipe the frame with a lint free towel to remove the excess slip solution. There is no need to wipe the glass...it is already clean...wiping the glass at this time can introduce dust and lint onto the window.

Film Application

1. Wet the glass thoroughly with the slip solution.
2. Spray the release liner and your fingers to reduce static electricity.
3. It is important not to touch the adhesive with dry fingers once the release liner has been removed. This will result in finger prints that will be visible when installed.
4. Begin peeling the release liner from the film. Spray the exposed adhesive with slip solution.
5. Apply the film to the glass and position it so that it is centred on the glass with equal gaps on all edges.





6. Spray the surface of the newly installed film once it is positioned on the glass. This reduces the friction between the laminate and the power squeegee.

7. Use the Blue Max power squeegee to start to push the water out from behind the film. Use light strokes and work from the top to the bottom.

8. Use the Blue Max power squeegee again, this time applying more pressure to the glass surface in order to remove excess water from behind the film and glass surfaces.

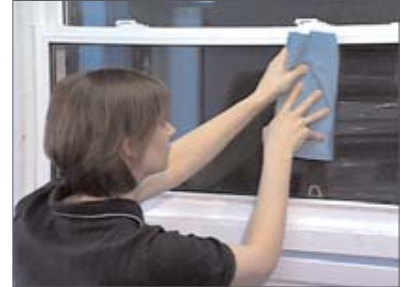


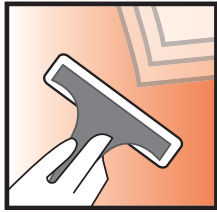
Glass Protection Self-Installation Kit

Final Step - Bumping

- 1.** Use the 5 way tool and wrap it in a lint free towel to protect both the film and absorb the excess slip solution. With firm pressure, begin $\frac{3}{4}$ to the left or right of the window. Push out towards the edge any remaining moisture from between the glass and film. Make sure you continue over the edge of the film to absorb the remaining moisture and prevent it from being drawn back under the film. Change the towel position frequently to ensure you don't mark the film's surface.
- 3.** Inspect the film for any areas where the film does not lay flat on the glass. This is referred to as a finger. If a finger appears, continue to use the 5 way tool wrapped in a lint free towel and apply pressure to the area towards the edge of the film.
- 4.** Wipe the excess moisture from the sill and frame.

Your installation is complete.





Maintenance and Cleaning

Depending on the exposure to sunlight and amount of moisture left behind after bumping, the film can take between 30 - 60 days to fully cure. During this curing process, excess moisture (which can resemble small pockets of water or haziness) will disappear and the film should appear clear. If small pockets of water do form, do not pierce them as this will create an unsightly hazy appearance around the hole.

During this curing time, do not wash the window. After the curing time, windows can be washed using non-abrasive materials such as ammonia, water/alcohol and soft paper towel, cloths or squeegees.